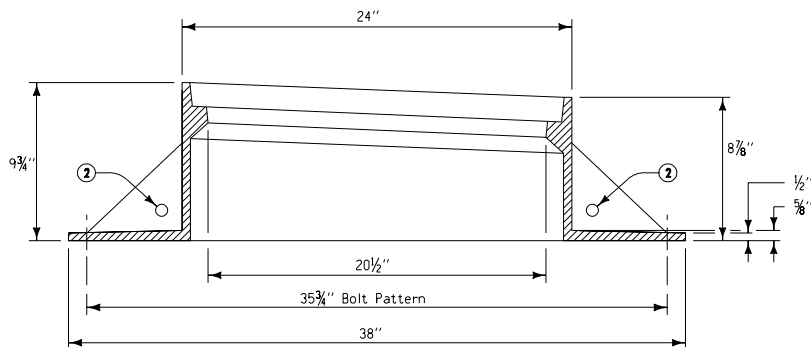
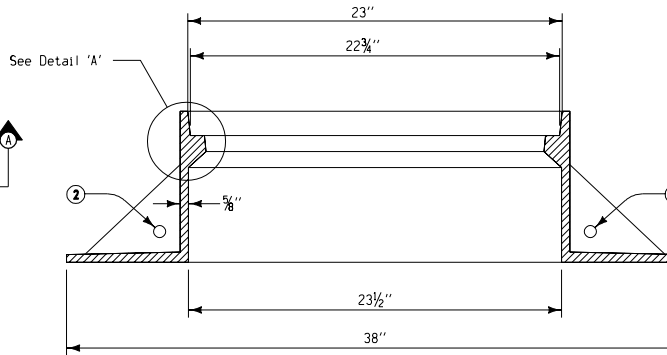


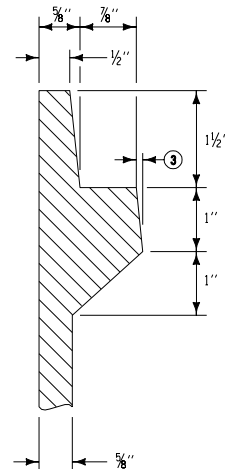
PLAN



SECTION B-B



SECTION A-A



DETAIL 'A'

#### General Notes:

All castings shall be Class 30 or better gray iron castings complying with the Standard and Supplemental Specifications and shall be essentially as detailed hereon. The castings illustrated hereon are only typical. Alternate designs for similar situations may be submitted to the Engineer for approval. Minimum weight requirements will be met unless authorization is received for any such deviation. All castings subject to roadway traffic shall have machine ground bearing surface to prevent rattling, and match-marked before delivery. The use of grinding pads is allowed as long as all dimensional requirements are met.

Finish of castings shall be smooth and free of defects as per Standard and Supplemental Specifications. Painting of casting is not required; however, if used, paint shall be evenly applied and neither sticky nor brittle when dry.

All component parts of casting shall fit smoothly together without forcing and finished product shall have a completely satisfactory appearance.

An identifiable trade name or mark may be imprinted on castings by the casting foundry.

Unless specified otherwise as a part of detail plans, the cast iron frame described hereon shall not be paid for separately, but shall be included with and considered incidental to the bridge end drain or intake.

- ① Provide 9/16" diameter holes at locations indicated.
- ② Drill or Core 3/4" holes.
- ③ DRAFT (Small Casting Taper) will be permitted.

Minimum Weight = 210 lbs.

See Standard Road Plan RA-67A for details of Type 10 Grate.

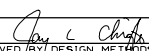
 **Iowa Department of Transportation**  
Project Development Division

**STANDARD ROAD PLAN RA-67B**

REVISION: Replaces Standard Road Plan RA-13C.

REVISION NO.

New

APPROVED BY:  11-05-99

DESIGN METHODS ENGINEER

REVISION DATE

02-11-00

FRAME  
FOR TYPE 10 GRATE